

MARINE WEATHER SERVICES



U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration

MARINE WEATHER SERVICE

Few people get closer to weather than those who sail the turbulent boundary between air and water, and few have a greater need for timely information on the state of the environment—information available from NOAA, the National Oceanic and Atmospheric Administration of the U.S. Department of Commerce.

NOAA's National Weather Service provides marine weather reports, forecasts, and warnings which serve all who sail for commerce, livelihood, or recreation.

This pamphlet describes some of the marine weather products and displays of the National Weather Service. Know them, use them, and navigate safely.

NOAA Weather Radio

The National Weather Service provides mariners with continuous broadcasts of the latest weather information from locations throughout the U.S. These NOAA Weather Radio transmissions repeat taped messages every four to six minutes. Tapes are up-dated periodically, usually every two to three hours, and amended as required to include the latest information. Messages include weather and radar summaries, wind observations, visibility, sea and lake conditions, and detailed local and area forecasts, as well as information tailored to the needs of boating enthusiasts and others who use the water for work or recreation. When severe weather warnings are in order, routine transmissions are interrupted and the broadcast is devoted to emergency warnings.

For the current list of NOAA Weather Radio Stations, please write: National Weather Service (Attn: W112), Silver Spring, Md. 20910.

NOAA Weather Radio broadcasts on 162.40, 162.475 and 162.55 MHz can usually be received within 20 to 40 miles (30 to 60 km) from the transmitting antenna site, depending on terrain and the quality of the receiver used. Where transmitting antennas are on high ground, the range is somewhat greater, reaching 60 miles (100 km) or more. The VHF-FM frequencies used for these broadcasts require narrow-band FM receivers. The National Weather Service recommends receivers having a sensitivity of one microvolt or less and a quieting factor of 20 decibels.

Some receivers are equipped with a warning alert device that can be turned on by means of a tone signal controlled by the National Weather Service office concerned. This signal is transmitted for 13 seconds preceding an announcement of a severe weather warning.

Marine Weather Services Charts

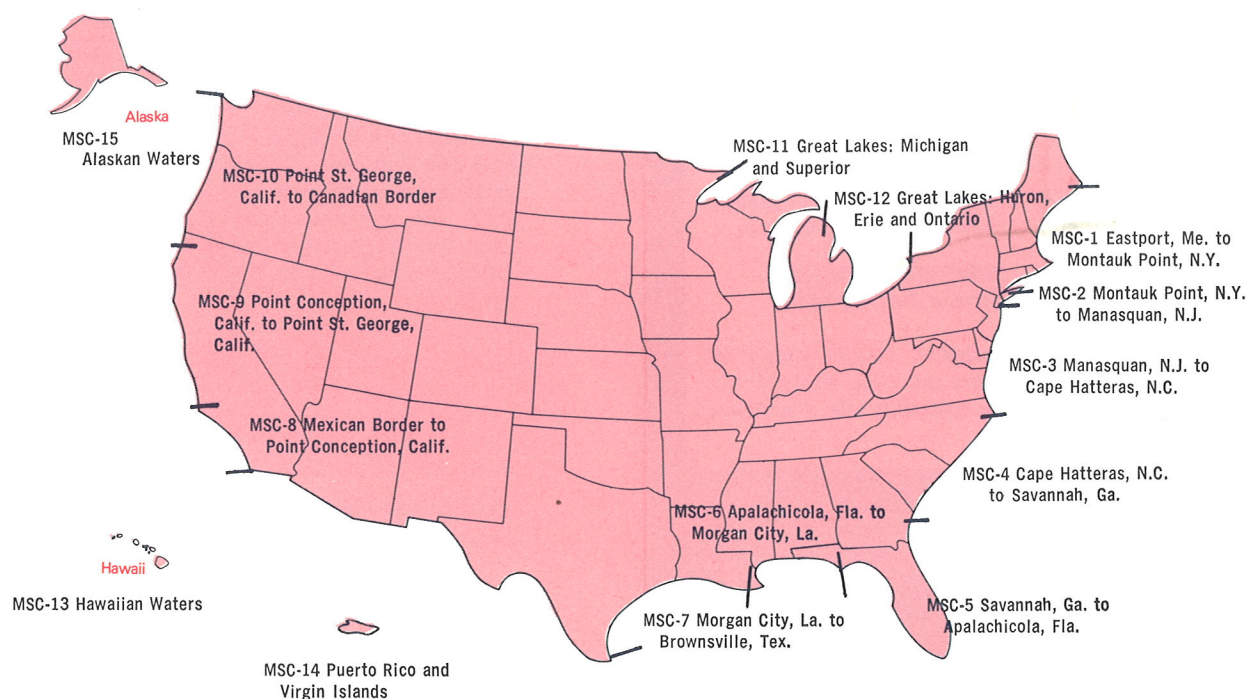
Broadcast schedules of radio stations, National Weather Service office telephone numbers and locations of warning display stations, are shown on Marine Weather Services Charts, issued periodically for the areas shown below.

Copies of these charts are available at local marinas and marine chart dealers, or by ordering from: Distribution Division (C44)

National Ocean Survey

6501 Lafayette Ave.

Riverdale, Maryland 20840—Price 25¢



Weather Warnings and Forecasts

Weather forecasts for boating areas in the United States and Puerto Rico are issued every six hours by the National Weather Service. Each forecast covers a specific coastal area, as for example, "Eastport, Me., to Merrimack River, Mass." If strong winds or sea conditions hazardous to small-boat operations are expected, forecasts include a statement as to the type of warning issued and the areas where warnings are in effect.

Similar forecasts and warnings are issued for numerous inland lakes, reservoirs, and river waterways throughout the country. Warnings of coastal and river flooding are also issued as required.

Latest forecasts are available also from commercial radio and television and marine radio-telephone broadcasts. When storm and flood warnings are in effect, all stations make frequent broadcasts of these advices as a service to small-craft operators, the general public, and other interests.

Display Signals

SMALL CRAFT*

Advisory



DAYTIME: Red Pennant.

NIGHTTIME: Red Light Over White Light.

Indicates: Forecast winds as high as 33 knots and sea conditions considered dangerous to small-craft operations.

GALE

Warning



DAYTIME: Two Red Pennants.

NIGHTTIME: White Light Over Red Light.

Indicates: Forecast winds in the range 34-47 knots.

STORM

Warning



DAYTIME: Square Red Flag With Black Square Centered.

NIGHTTIME: Two Red Lights.

Indicates: Forecast winds 48 knots and above no matter how high the wind speed. If the winds are associated with a tropical cyclone (hurricane), storm warnings indicate forecast winds of 48-63 knots.

HURRICANE**

Warning



DAYTIME: Two Square Red Flags With Black Squares Centered.

NIGHTTIME: White Light Between Two Red Lights.

Indicates: Forecast winds of 64 knots and above, displayed only in connection with a hurricane.

* Small Craft Advisories cover a wide range of wind and sea conditions, and the "small craft" category includes boats of many sizes and designs. The Small Craft Advisory should alert the mariner to determine immediately the reason for the display by tuning his radio to the latest marine broadcast. Deciding the degree of danger is left up to the boatman, based on his experience and the size and type of boat.

** Hurricane warnings are not issued for the Pacific coast north of Pt. Arguello, Calif., in Alaska, or for the Great Lakes.

Weather Rules for Safe Boating

Before setting out:

Obtain the latest available weather forecast for the boating area. Where they can be received, the NOAA Weather Radio continuous broadcasts (VHF-FM) are the best way to keep informed of expected weather and sea conditions.

If you hear on the radio that warnings are in effect, or see flags or lights at warning display stations, don't venture out on the water unless you are confident that your boat can be navigated safely under forecast conditions of wind and sea.

While afloat:

1. Keep a weather eye out for: the approach of dark, threatening clouds, which may foretell a squall or thunderstorm; any steady increase in wind or sea; any increase in wind velocity opposite in direction to a strong tidal current. A dangerous rip tide condition may form steep waves capable of broaching a boat.
2. Check radio weather broadcasts for latest forecasts and warnings.
3. Heavy static on your AM radio may be an indication of nearby thunderstorm activity.
4. If a thunderstorm catches you while afloat, you should remember that not only gusty winds, but also lightning poses a threat to safety.
 - stay below deck if possible.
 - keep away from metal objects that are not grounded to the boat's protection system.
 - don't touch more than one grounded object at the same time (or you may become a shortcut for electrical surges passing through the protection system).

What about navigation? Do you have the NOAA National Ocean Survey charts and other publications covering your part of coastal or Great Lakes waters? Check your local office of the National Weather Service or National Ocean Survey for information on how and where to get these and other essential aids to navigation.

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